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Attitudes and Beliefs As Verbal Behavior

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Attitudes and beliefs are analyzed as verbal behavior. It is argued that shaping by a verbal community is an essential part of the formation and maintenance of both attitudes and beliefs, and it is suggested that verbal communities mediate the important shift in control from events in the environment (attitudes and beliefs as tacts) to control by other words (attitudes and beliefs as intraverbals). It appears that both attitudes and beliefs are constantly being socially negotiated through autoclitic functions. That is, verbal communities reinforce (a) reporting general rather than specific attitudes and beliefs, (b) presentation of intraverbals as if they were tacts, and (c) presentation of beliefs as if they were attitudes. Consistency among and between attitudes, beliefs, and behavior is also contingent upon the reinforcing practices of verbal communities. Thus, attitudes and beliefs can be studied as social behavior rather than as private, cognitive processes.

Key words: verbal behavior, social psychology, attitudes, beliefs, verbal communities

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The term "attitude" has had a variety of meanings in its long history (Fleming, 1967; McGuire, 1985; Thomas & Znaniecki, 1918). Social psychologists commonly write that attitudes are generalized affective responses to stimuli and contexts (see Lloyd & Street, this issue, for traditional definitions); examples are "I like going to the beach," or "I disapprove of a United Nations military intervention in Bosnia." In most of the social psychological literature, attitudes are treated as an inner source of true knowledge. Attitude statements merely reveal the state of stored attitudes; they are verbal reports of a person's emotional predisposition toward some object or event ("I love to go to the opera"; "I absolutely hate listening to Gubaidulina").

Attitudes are often contrasted with "beliefs," a term that refers to verbal knowledge about something ("I believe that there is sand on the beach"; "I believe that a military intervention in Bosnia will lead to an unproductive destabilization of the whole area"). Beliefs do not necessarily imply liking or disliking, and it is this feature that traditionally separates beliefs from attitudes. Although the conceptual relations between attitudes and beliefs have generated extensive discussions in social psychology, some social psychologists equate the two because the relations between them are still not clear: "We simply take an attitude to be an evaluative belief" (Abelson & Prentice, 1989, p. 363).

The aim of this paper is to analyze attitudes and beliefs as verbal behavior, instead of treating them as inner sources of knowledge that are sometimes expressed as external behavior. First, I will examine the concept of attitude as verbal behavior, showing tacting, intraverbal, and manding functions (Skinner, 1957). Second, beliefs will be analyzed, concentrating on their purported separation from attitudes. Finally, the consistency between attitudes and other verbal and nonverbal behavior will be discussed: A common problem for social psychologists is that observed behavior often does not match the verbally reported liking or disliking (Lloyd & Street, this issue). In the final section, it will be shown that when attitudes are considered as verbal behavior, the problem of consistency becomes an empirical question of whether or not verbal communities shape consistency.

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ATTITUDES AS VERBAL BEHAVIOR

Social psychology traditionally treats attitudes as something a person has or

possesses (Abelson & Prentice, 1989), privately decided likes and dislikes that are reported in attitude statements. Putting this into more behavioral terms, attitudes might be viewed as reports of private events. Indeed, Bem's (1965) behavioral interpretation of attitudes along these lines has even gained some acceptance in social psychology. He suggested that one's reported likes and dislikes are based upon observations of one's previous behavior. But, even here, a single function of attitudes is assumed, that of reporting a private event.

If attitudes are to be analyzed as verbal behavior, however, it is necessary to consider all possible functions of attitudes, in addition to reporting a private event. The statement "My attitude towards fluoridation of water supplies is one of disagreement" might have any of the multiple functions of verbal behavior. These multiple functions, to be defined below, include tacts, intraverbals, and mands. Such an approach produces a functional analysis of attitudes that is very different from previous functional analyses of attitudes by social psychologists (Herek, 1986, 1987; Katz, 1960; Pratkanis, Breckler, & Greenwald, 1989; Smith, Bruner, & White, 1956; Snyder & DeBono, 1987). For example, because attitudes have a verbal basis, it is clear that social consequences from verbal communities must play a role in each of the multiple functions of attitudes. Such an extensive basis for social control of attitudinal reports has only rarely been provided by previous functional analyses (Eiser & van der Pligt, 1984; Thomas & Znaniecki, 1918). The major role of verbal communities in shaping attitudes will become clear as they are analyzed as tacts, intraverbals, and mands.

Attitudes As Tacts

As mentioned above, tacting is assumed implicitly by social psychologists to be the major function of attitudes: They report a private stimulus. Tacts are verbal behavior under the joint control of generalized social contingencies and stimuli in the environment (Skinner, 1957). Simply treating attitude statements as tacts, however, is problematic, because each of these two sources of control for tacts is more complicated than the traditional analysis of attitudes. I will first consider some of the different social functions that control attitude statements, and second, how stimuli come to control attitude statements that might be tacts.

The first social function of attitudes probably develops through generalization from tacts about events in the environment to tacts about our own behavior and then to attitudinal tacts about many of our own behaviors. Reporting on the environment is maintained by generalized social consequences from childhood ("There is a cat up that tree"), and the tacting of behavior, such as "I rescued a cat from up a tree," is similarly reinforced as a report of my behavior. But I can also be reinforced for generalizing across many instances of positive behavior towards cats and state "I really like cats"; such an attitude statement is reinforced as if it were a simple tact about the world (Bem, 1965). The point is that our verbal behavior about the environment is loosely reinforced by others, and this leads to reporting likes and preferences beyond specific instances. In early life at least, reporting attitudes appears to be strengthened in this very general way by teachers and parents. From my observations as an uncle, once children have learned to speak, they spend a very large proportion of their time reporting what they like and dislike.

Another social function of attitudes as tacts is to avoid giving a detailed reply to a question. When asked "What do you think of a United Nations military intervention in Bosnia?" we ordinarily respond, because refusing to answer a question is generally punished. Rather than list every belief or thought about the situation in Bosnia, a common reply is to make an attitude statement and say, for example, "I disapprove of a United Nations military intervention in Bosnia." If we were to reply by giving every thought and belief about the topic, we would lose our audience.

A third social function for reporting attitudes as tacts is that reporting attitudes can serve as a ritual social event, rather than anything that crucially depends on the attitudes reported. This means that reporting attitudes functions merely to provide social conversation, reciprocal verbal exchange, or to avoid silence (Murray, 1971; Skinner, 1957). Although conversations often seem to begin as tacts of certain key topics such as the weather, reporting attitudes about these topics might be reinforced by escape or avoidance of silence. Thus, exchanging attitudes can serve the social function of maintaining a verbal community by acting as a ritual behavior or generalized social exchange (Guerin, 1992b; Sahlins, 1965). The reinforcement of an uncle's listening to the multitude of likes and dislikes of the nieces and nephews is in the social exchange itself, and not from what is actually said.

I have so far discussed the condition of generalized social reinforcement as a basis for attitudes as tacts. One property of this relation is that attitudinal tacts can be biased depending upon the audience. If reinforcement is not at all contingent upon the content of what is said, bias would probably not occur. However, specific audiences typically listen and respond to specific attitudes. Audiences therefore function as discriminative stimuli for the reporting of specific attitudes, and this means that there is likely to be audience bias in reporting preferences. In an extreme case, an attitude question from another person can mand a particular reply: "You don't prefer dogs to cats, do you?" Almost always, therefore, a reported attitude will meet the contingencies of the verbal community that occasioned the report. Social context biases reported attitudes (Eiser & van der Pligt, 1984).

A behavior analysis of attitudes therefore affirms an important, but often ignored, point: Attitudes and attitude change are social behaviors. Social psychology has often treated attitudes as purely individual reports of a personal nature, especially with social psychology's current emphasis upon cognitive foundations (cf. Crocker, Fiske, & Taylor, 1984; Sherman, 1987), and has ignored the social basis that was assumed in the original study of attitudes (Thomas & Znaniecki, 1918). The behavior-analytic approach shows more clearly why attitudes are a social phenomenon: Attitudes are verbal statements that are maintained by generalized social reinforcement from a verbal community (cf. Erickson, 1982; Kiecolt, 1988; Verplank, 1955).

This in turn raises another point. Attitude scales and survey questions are predicated on a model that reported attitudes merely tap into an internal, private source (usually of beliefs or attitudes). The behavior analysis of attitudes presented here seriously questions this model, because attitudes always depend upon their social consequences; thus, attitude scales and survey questions will be a function of the particular person asking the question or of the whole verbal culture in which the survey is conducted (Silver, Abramson, & Anderson, 1986; Thomas & Znaniecki, 1918). It is no wonder then that when people are asked to fill in a 7-point scale about their attitudes to this or that, they often say or write, "Well it depends on what this is for" or "But it all depends upon the context." This has been a problem in attitude measurement, because the social psychological model assumes that people should be able to tact their "internalized" attitudes. As shown here, this "problem" turns out to be a fundamental property: Attitudinal tacts are controlled by social contingencies.

I have now dealt with the generalized and social nature of attitudes when considered as tacts. The other source of control for tacting is from the stimulus or stimulus context being tacted. For example, the statement "There is a cat up that tree" is a tact if the statement is jointly controlled by past social reinforcement for reporting such events and if there is a cat up the tree (Skinner, 1957). In the case of treating attitudes as tacts, however, such stimulus control is not at all clear. Some attitude statements seem very close to being under direct stimulus con-

trol ("I like playing with this cat in this room"), whereas others do not ("I like all cats"). The generality of the latter statement highlights the problem: Such a statement cannot be under the control of a discriminative stimulus that consists of all the cats in the world. Such a statement seems to be more intraverbal than tact. It is important to emphasize that tacts and intraverbals have a gray area between them that has not yet been clarified in behavior analysis (Guerin, 1992a).

Attitudes and Intraverbals

Intraverbals are verbal behavior that are under the joint control of social reinforcement and other verbal behavior. If someone says "Peru" and I reply "Lima," then the control of my reply comes both from hearing the word "Peru" and from a social history of being reinforced for saying "Lima" when questioned about Peru. I am not tacting Lima, especially if my reply was given while residing in Tokyo; the reply is controlled by other words and not by the city.

Attitudes can be treated as intraverbal behavior if the presentation of an attitude statement is under the control of the words being spoken rather than the immediate physical environment. In casual conversations about the weather, for example, the conversation is often controlled by words rather than the environment (tacting the weather outside). Much conversation consists of previously learned functional units of verbal behavior; for example, if the other person in a conversation says that they like dogs, then I pick up the conversation by replying that I prefer cats to dogs. That is, many attitude statements are under the control of previous verbal statements and a history of being reinforced for reporting attitudes when relevant topics come up in conversation. These effects are most often seen in casual conversations when talking itself is more important (has more consequences) than what is actually specified about preferences or what is seen at that moment in the environment.

That many attitude statements are intraverbals is also given plausibility because, as noted earlier, attitudes can refer to classes of behavior ("I like cats") and are more likely to be reinforced if they are general and do not list the many specific preferences. Therefore, reporting such attitudes is under the control of previous verbal behavior and the verbal community's control of intraverbal relations between words. There is a continuum between attitudes as tacts and attitudes as intraverbals, with social communities shaping the verbal shift from "I like playing with this cat in this room," which had some plausibility as a tact of preference, to "I like cats" and "I like all cats," which are intraverbals. In the same way that verbal communities reinforce general rather than concrete attitude reports, Street (this issue) argues that verbal communities also reinforce abstract descriptions rather than specific descriptions.

Another clue that attitudes are commonly intraverbal behavior is that many of our attitudes are about events we have never experienced. Expressing an attitude such as "I do not like the use of nuclear energy" must be intraverbal behavior, because I have had no experience with nuclear energy of any sort. All that I know I have read in newspapers or heard from other people.

Elsewhere it has been suggested that our knowledge and beliefs are often reinforced when presented as if they are tacts, when they really are intraverbals (Guerin, 1992a). Saying "Nuclear reactors are unsafe" in the same grammatical form as "Those trees are tall" makes a more powerful and influential statement than "I read somewhere that nuclear reactors are unsafe." Verbal communities can in this way shape a reinforcement history for presenting intraverbals in the form of tacts. In the same way, verbal communities can shape verbal behavior made up of an attitude presented as an intraverbal ("I like all cats but that's just the way I talk to myself and it's what other people have told me to say when asked") to an attitude presented as a tact ("I have a liking for cats"). Clearly, the latter is more likely to be reinforced in conversation.

Attitudes, Manding, and Autoclitics

Mands are verbal behavior that are controlled by specific reinforcers that follow from their production, and they are shaped by a verbal community that responds in an appropriate manner to the mand. So "pass the salt" is controlled by a history of getting X when "pass the X" is said in front of an appropriate listener. Making attitude statements can similarly result in specific positive or negative consequences, rather than the generalized consequences discussed so far, and can thus qualify as mands. Such a manding function can be shaped, and can shape the behavior of others. If your boss remarks that she does not like people who drink coffee while they work, this is not an innocent tact of her private attitude. Her statement will very likely shape the way you behave, and it may or may not have been "intended" to shape your behavior. In any event, it will no doubt function as if she had manded: "Do not drink coffee while you work or else!" Similarly, saying "I do not like the use of nuclear energy" shapes the behavior of the listener. Presenting such an attitude statement can shape the listener's immediate verbal behavior in a way that reinforces the speaker.

There are problems for questionnaire design that arise from this analysis of attitudinal mands. If attitude statements have primarily been mands in the past, having to quantify your attitude toward nuclear energy on a 7-point scale can be perplexing, because there is no social negotiation with a listener. Questionnaire recipients may wish to influence the questionnaire giver by their attitude reports, but this is difficult without writing extra comments in the margins. It is a common practice in questionnaire research for people both to add written comments about the questions asked and to try and work out what the questionnaire is after.

The manding function of many attitude statements is also reflected in the frequent use of autoclitics: qualifications made to attitude statements that modify the effect of the statement upon the listener. For example, the following are often given along with attitude reports: "It seems to me that . . . ," "I had always believed that . . . ," "I think that I like . . . ," "I rather like . . . ," and "I tend not to go in for . . . ." Examples of attitudinal autoclitics can be found in the social psychological research on impression management and self-presentation (Baumeister, 1982; Tedeschi, 1981), although autoclitics are interpreted there as attempts by the speaker to define him- or herself to others rather than as attempts to modify the consequences from the listener.

If there are negative consequences for making certain attitude statements, they can be avoided in various ways through the use of autoclitics. For example, when talking to a cat-lovers society, instead of remarking "I like dogs" one can say "I like dogs somewhat." Any negative consequences can be easily averted with this second statement. Another strategy is to provide verbal discriminative contexts after a negative verbal reply. If "I like dogs" receives the reply, "but they always bark, which is annoying," then you can qualify your reported attitude thus: "Oh yeah, I meant that I only like dogs that don't bark." As mentioned above, when people are filling in questionnaires they are frequently annoyed that they cannot add such qualifying autoclitics to their ratings.

In summary, there is far more to attitude statements than just a simple report of a remembered preference. We have seen that although attitudes can function as tacts through generalized social control for reporting many behaviors as a preference, they can also function both as intraverbals, when the production of the appropriate words is reinforced independently of the environment being referenced, and as mands, when listeners shape specific attitudes with specific reinforcers. Attitudes can have many functions, and these are shaped by verbal communities and are negotiated by the person reporting the attitude through the use of autoclitic functions. These different functions of attitudes can also be used to examine the relations between beliefs

and attitudes and the role of verbal communities in producing consistency between attitudes and behavior.

BELIEFS AND ATTITUDES

As mentioned at the start of this paper, one research area in social psychology has been to study the relations among beliefs, attitudes, and behavior (e.g., Fishbein & Ajzen, 1975; Fraley, 1984). Beliefs are usually distinguished from attitudes because beliefs do not specify preference. "The likelihood of a nuclear accident is quite large over a 10-year period" is a belief, whereas "I do not like the use of nuclear energy" is an attitude. The first point to be noted with this example is that both the belief and the attitude in this case are purely intraverbal, because I have never had any experience with nuclear energy or nuclear power plants. This means that everything I believe, like, or dislike about nuclear energy and its vicissitudes comes from what people have told me and what I have read.

One relation between beliefs and attitudes is that people often claim that their attitudes are *based upon* their beliefs, and that they report a positive or negative attitude *because* they believe there are good or bad outcomes: "Because the risk of nuclear accidents is high, I do not like the use of nuclear energy." This looks as if attitudes are now a tact of private beliefs rather than of private experience. The behavior-analytic point, however, is that presenting a belief to bolster an attitude statement is itself a social act of persuasion that requires further analysis in terms of both the verbal community and the manding or intraverbal function of the attitude statement to which it is attached. If I am talking to an audience that does not believe that the risk of nuclear accidents is high, that belief would be left out of my statement. The reporting of attitudes is reinforced if supporting beliefs are given, but only if the verbal community agrees with those supporting beliefs.

This argument shows one way in which the relation between reporting attitudes or beliefs depends upon reinforcement from the verbal community, rather than upon the state of the world. Another relation is that the use of attitude statements has an autoclitic function that makes their production more likely to be reinforced than reporting the corresponding belief. If I report a belief that "Nuclear reactors are unsafe," this statement can be disputed: I can be asked for evidence, or the opposite can be stated by the listener: "No, nuclear reactors are quite safe, it's been proven." If, on the other hand, I were to report the corresponding attitude instead of the belief, "I do not like the use of nuclear energy," this cannot be tackled in the same way; at the very least, I can reply after any ensuing arguments, "Despite all you've said, I still do not like the use of nuclear energy." Thus, presenting the same topic as an attitude rather than a belief is often reinforced, and this depends upon the shaping by a verbal community.

The implication is that the difference between beliefs and attitudes about any topic is contingency shaped by a community of listeners, and not an inherent difference between statements that express a probability of outcomes and statements that express preference. This discussion has therefore uncovered two stylistic autoclitic functions that determine whether attitude or belief statements are made about a topic: Beliefs that are presented in the form of attitudes are reinforced more often, and intraverbal attitudes or beliefs that are presented in the form of tacts are reinforced more often. The effects on a listener can be modified more if attitudes rather than beliefs about the outcomes are stated, and if both attitudes and beliefs can be presented as tacts rather than as intraverbals.

It seems, then, that the difference between beliefs and attitudes is socially determined. Whether there is a strong or weak relation between the two will depend upon the social contingencies. My beliefs might fully coincide with my attitudes if the social contingencies reinforce this, or they might be opposed. As suggested elsewhere, calling a behavior

"irrational," in the sense of going against commonsense beliefs, is usually indicative of hidden, competing social contingencies (Beattie, 1970; Guerin, 1992a). As we will see in the final topic for discussion, the consistency between attitudes and behavior is also socially determined.

ATTITUDE AND BEHAVIOR CONSISTENCY

One question that has perplexed attitude researchers is the relationship between attitudes and behavior (Ajzen & Madden, 1986; Fazio & Zanna, 1981; Fishbein & Ajzen, 1975; see also Lloyd & Street, this issue). People are not always consistent in their attitudes and their behavior. They might report that they "like" cats but are then seen to mistreat cats and keep them away from their homes. From all that has been said in this paper, it should be clear that there is no automatic link between attitudes and behavior (Lloyd, this issue). Traditional social psychological models assume that attitudes accurately report an inner state; thus, they find attitude–behavior inconsistencies problematic (cf. Fishbein & Ajzen, 1975).

For the behavior analyst, the problem is that there are so many ways in which inconsistencies between attitudes and behavior can arise. Any conflict between the many sources of control given in this paper could lead to inconsistencies. For example, if a verbal community reinforced statements about liking dogs rather than cats, this would strengthen the verbal behavior of reporting liking dogs. If there were other contingencies, however, that strengthened actual positive behaviors towards cats, an attitude–behavior inconsistency would occur. Even with the Ajzen and Fishbein (1980) model, which has traditionally separated attitudes and beliefs both from social pressure and from motivation to comply with the views of other people, it has recently been shown that social conditions can affect the supposedly private evaluative beliefs (Kashima, Gallois, & McCamish, 1993).

To put this point succinctly, the "truth" of attitudes is not whether they correspond to behavior, nor whether they accurately correspond to some inner "truth," but what effect they have on the person who hears them spoken. Given the less-than-perfect control of our nonverbal behavior by our verbal behavior, the behavior analyst is more likely to wonder how so much consistency can possibly happen. The correspondence literature suggests that there are social contingencies operating from an early age that strengthen the consistency between our attitudes and behaviors (cf. Riegler & Baer, 1989; Lloyd, this issue), even if this consistency quite often falls short.

The same social contingencies shaping consistency probably apply to consistencies between any of our behaviors, where attitude/behavior and saying/doing are but two conspicuous cases. If we look at behavior–behavior consistency as another example, there are mild forms of social punishment for someone who does one thing one day and the opposite the next day. Walt Whitman (1855/1986, line 1314) even felt he had to justify inconsistency, pointing out that consistency is not a logical necessity of life:

> Do I contradict myself?
> Very well then . . . I contradict myself;
> I am large . . . I contain multitudes.

That is, given our large repertoires of varying types of behavior, the multiple sources of control over those behaviors, and the multiple verbal communities of modern life of which we find ourselves a part (Guerin, 1992a), we should expect inconsistencies. This is especially so with verbal behavior, because it is under the control of others. The physical environment to a large degree will select consistency between sequential behavior acting on the environment, but because verbal behavior affects the environment only through other people, the consistency between verbal behavior and nonverbal behavior will be weaker. As has been found in the social psychological literature, shaping by direct experience with contingencies and shaping by a verbal community through talking lead to dif-

ferences in attitude–behavior consistency (Fazio & Zanna, 1981).

In conclusion, the consistency between behaviors, including verbal and nonverbal ones, has been dealt with by social psychologists, but they have not understood the contingent social control of such consistency. Instead, the motivational basis of consistency has been treated as a need or a fundamental desire: "Recently, recognition has grown concerning a somewhat different type of *consistency drive* than the private, intrapersonal variety that concerned the early theorists. The *desire to appear consistent* is currently seen as having substantial influence over much human action as well" (Cialdini, 1987, p. 169, my italics).

It might seem superficial to translate "consistency drive" and "desire to appear consistent" into the language of behavior analysis, but much is at stake. Most important, as has been stressed throughout this paper, if the social control of attitudes and beliefs is not acknowledged, then the social contexts and consequences for behavioral consistency will not be investigated. Drives and desires imply an origin inside the person and thus the social conditions for their appearance and disappearance are not researched. As a result, the social conditions for presenting beliefs as attitudes and intraverbals as tacts are not considered. But as we have seen, such drives and desires can be viewed merely as surrogates for the control of attitudes, beliefs, and behavior by verbal communities.

REFERENCES

Abelson, R. P., & Prentice, D. A. (1989). Beliefs as possessions: A functional perspective. In A. R. Pratkanis, S. J. Breckler, & A. G. Greenwald (Eds.), *Attitude structure and function* (pp. 361–381). Hillsdale, NJ: Erlbaum.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology, 22,* 453–474.

Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin, 91,* 3–26.

Beattie, J. H. M. (1970). On understanding ritual. In B. R. Wilson (Ed.), *Rationality* (pp. 240–268). Oxford: Basil Blackwell.

Bem, D. J. (1965). An experimental analysis of self-persuasion. *Journal of Experimental Social Psychology, 1,* 199–218.

Cialdini, R. B. (1987). Compliance principles of compliance professionals: Psychologists of necessity. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol. 5, pp. 165–184). Hillsdale, NJ: Erlbaum.

Crocker, J., Fiske, S. T., & Taylor, S. E. (1984). Schematic bases of belief change. In R. J. Eiser (Ed.), *Attitudinal judgment* (pp. 197–226). New York: Springer-Verlag.

Eiser, J. R., & van der Pligt, J. (1984). Attitudes in a social context. In H. Tajfel (Ed.), *The social dimension: European developments in social psychology* (Vol. 2, pp. 363–378). Cambridge: Cambridge University Press.

Erickson, B. H. (1982). Networks, ideologies, and belief systems. In P. V. Marsden & N. Lin (Eds.), *Social structure and network analysis* (pp. 159–172). London: Sage.

Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude-behavior consistency. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 14, pp. 161–202). New York: Academic Press.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Fleming, D. (1967). Attitude: The history of a concept. *Perspectives in American History, 1,* 285–365.

Fraley, L. E. (1984). Belief, its inconsistency, and the implications for the teaching faculty. *The Behavior Analyst, 7,* 17–28.

Guerin, B. (1992a). Behavior analysis and the social construction of knowledge. *American Psychologist, 47,* 1423–1432.

Guerin, B. (1992b). Social behavior as discriminative stimulus and consequence in social anthropology. *The Behavior Analyst, 15,* 31–41.

Herek, G. M. (1986). The instrumentality of attitudes: Towards a neofunctional theory. *Journal of Social Issues, 42,* 99–114.

Herek, G. M. (1987). Can functions be measured? A new perspective on the functional approach to attitudes. *Social Psychological Quarterly, 50,* 285–303.

Kashima, Y., Gallois, C., & McCamish, M. (1993). The theory of reasoned action and cooperative behaviour: It takes two to use a condom. *British Journal of Social Psychology, 32,* 227–239.

Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly, 24,* 163–204.

Kiecolt, K. J. (1988). Recent developments in attitudes and social structure. *Annual Review of Sociology, 14,* 381–403.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 2, pp. 233–346). New York: Random House.

Murray, D. C. (1971). Talk, silence, and anxiety. *Psychological Bulletin, 75,* 244–260.

Pratkanis, A. R., Breckler, S. J., & Greenwald, A. G. (Eds.). (1989). *Attitude structure and function.* Hillsdale, NJ: Erlbaum.

Riegler, H. C., & Baer, D. M. (1989). A developmental analysis of rule-following. In H. W. Reese (Ed.), *Advances in child development and behavior* (Vol. 21, pp. 191–219). New York: Academic Press.

Sahlins, M. D. (1965). On the sociology of primitive exchange. In M. Banton (Ed.), *The relevance of models for social anthropology* (pp. 139–236). London: Tavistock.

Sherman, S. J. (1987). Cognitive processes in the formation, change and expression of attitudes. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol. 5, pp. 75–106). Hillsdale, NJ: Erlbaum.

Silver, B. D., Abramson, P. R., & Anderson, B. A. (1986). The presence of others and overreporting of voting in American national elections. *Public Opinion Quarterly, 50,* 228–239.

Skinner, B. F. (1957). *Verbal behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Smith, M. B., Bruner, J. S., & White, R. W. (1956). *Opinions and personality.* New York: Wiley.

Snyder, M., & DeBono, K. G. (1987). A functional approach to attitudes and persuasion. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol. 5, pp. 107–125). Hillsdale, NJ: Erlbaum.

Tedeschi, J. T. (Ed.). (1981). *Impression management theory and social psychological research.* New York: Academic Press.

Thomas, W. I., & Znaniecki, F. (1918). *The Polish peasant in Europe and America.* Chicago: University of Chicago Press.

Verplank, W. S. (1955). The control of the content of conversation: Reinforcement of statements of opinion. *Journal of Abnormal and Social Psychology, 51,* 668–676.

Whitman, W. (1986). *Leaves of grass.* New York: Viking Penguin. (original work published 1855)